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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,965	04/25/2007	Taishi Tsuji	46969-5437	9939

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EXAMINER	
COUGHLIN, ANDREW J	

ART UNIT	PAPER NUMBER
4113	

MAIL DATE	DELIVERY MODE
04/01/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/573,965	TSUJI, TAISHI	
	Examiner	Art Unit	
	ANDREW J. COUGHLIN	4113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☒ Claim(s) *4* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 March 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *20061116*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The references cited within the IDS document submitted on 11/16/2006 have been considered.

Claim Objections

Claim 4 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Kwong (US Pub. No. 2003/0054197 A1).

As to claim 1, Kwong teaches an organic electroluminescent device comprising: a pair of positive and negative electrodes opposed to each other (ITO used an anode in ¶ [0039] and Al as a cathode in ¶ [0040]); and an organic functional layer formed between the positive and negative electrodes and having three or more thin films including a light emitting layer made of an organic compound (Organic functional layer comprises organic materials CuPc, NPD, CBP, BAlq and Alq3 as taught in ¶ [0040]), characterized in that the organic functional layer includes a pair of first and second layers and a third layer held between the first and second layers (CuPc, NPD and BAlq), each of the first and second layers being made of an organic compound a glass transition temperature of which is equal to or higher than a first temperature, the third layer being made of an organic compound a glass transition temperature of which is lower than the first temperature, and the third layer having a thickness of 30 nm or less (NPD layer with total thickness of 300 angstroms (30 nm) in ¶ [0040]). Examiner notes that the glass transition temperatures of the following materials can be found in the applicant's specification: CuPc (Tg = >300 ºC), NPD (Tg = 96 ºC), BAlq (Tg = 99 ºC) and Alq3 (Tg =167 ºC). CuPc and BAlq have glass transition temperatures equal to or above a first temperature, and NPD has a glass transition temperature lower then the first temperature. The NPD layer is formed between the layers of CuPc and BAlq.

As to claim 2, Kwong teaches the organic electroluminescent device according to claim 1. Additionally, Kwong teaches an organic electroluminescent device wherein the glass transition temperature of the third layer is in a range satisfying that the difference in the glass transition temperature between the third layer and the first or second layer

is less than 18 ºC (¶ [0040]). Kwong teaches a third layer of NPD (Tg = 96ºC) which has a glass transition temperature within 18 ºC of a second layer consisting of BAlq (Tg = 99 ºC).

As to claim 3, Kwong teaches the organic electroluminescent device according to claim 1 or 2. Additionally, Kwong teaches the organic electroluminescent device wherein the first temperature is 98 ºC (¶ [0040]). With the first temperature being 98 ºC, Kwong teaches CuPc (Tg = >300 ºC) and BAlq (Tg = 99 ºC) which have glass transition temperatures equal to or above 98 ºC and NPD (Tg = 96 ºC) has a glass transition temperature lower then 98 ºC.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW J. COUGHLIN whose telephone number is (571)270-7813. The examiner can normally be reached on Monday through Friday during normal business hours of 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott B. Geyer can be reached on (571)272-1958. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AJC/

/Scott B. Geyer/
Supervisory Patent Examiner, Art Unit 4113